



March 9, 2021

***Via Email/Sharefile***

Mr. Andrew Park & Mr. Sameh Abdellatif  
Hazardous Waste Programs Branch  
US Environmental Protection Agency Region 2  
290 Broadway, 22<sup>nd</sup> Floor  
New York, New York 10007-1866

**Re: Second Quarter and Third Quarter 2020 Progress Report Response to  
Comments (November 13, 2020 Comments)  
Hess Corporation Former Port Reading Complex (Site)  
750 Cliff Road  
Woodbridge, Middlesex County, New Jersey  
NJDEP PI# 006148  
ISRA Case No. E20130449  
EPA ID No. NJD045445483**

Dear Mr. Park:

Earth Systems, Inc. (Earth Systems) has prepared this letter on behalf of Hess Corporation (Hess) regarding the draft comments provided by the New Jersey Department of Environmental Protection (NJDEP) and Environmental Protection Agency (EPA) relating to the Second Quarter and Third Quarter 2020 Progress Reports submitted on July 31, 2020 and October 31, 2020. Please note that a meeting was held on January 12, 2021 to discuss this comment letter and meeting notes were uploaded to the portal on January 26, 2021. All changes noted below will be instituted starting with the Second Quarter Progress Report (2021).

**NJDEP Comments & Earth Systems/Hess Responses**

**NJDEP Comment 1:** Future quarterly reports should only acknowledge any sampling and data collection completed and the method used. No new data should be included in the progress reports as these are used to keep the case team apprised of ongoing events. Include any new data from sampling events in the semi- annual groundwater reports only. This eliminates duplicate reviews of the same data and will speed up the review process.

**Earth Systems/Hess Response 1:** All future Quarterly Progress Reports will only note that groundwater sampling has occurred. Quarterly groundwater sampling data will be included in the Semi-Annual Reports only.

**NJDEP Comment 2:** Introduction and Summary Table:

- Include AOC 103 in future “Summary of Actions” table based on LNAPL at FA-5 and sock installation.

**Earth Systems/Hess Response 2:** As specified, Area of Concern (AOC) 103 has been included in the “Summary of Actions” table for future quarterly reports.

**NJDEP Comment 3:** ISRA and Regulatory Requirements Update:

- Comments were provided on the November 2015 SIR (BGWPA review memo September 27, 2016 and attachments: 1. 2015 CID and PA/SI AOC List Inconsistencies, 2. Specific AOC Comments, 3. Aerial Photos for AOC 103) and December 20, 2017 SIR response to comments (BGWPA review memo March 27, 2018). Confirm that the NJDEP SIR comment letter dated August 10, 2017 referenced at the beginning of this section included the three attachments. Comments from all memos and attachments pertaining to the SIR will need to be addressed with the RIWs being developed.

**Earth Systems/Hess Response 3:** The comment letters referenced in the *ISRA and Regulatory Requirements Update* section include all comment letters specified above. Going forward, all comment letters will be listed.

**NJDEP Comment 4:** ISRA and Regulatory Requirements Update:

- The AOCs identified in the table as priorities (AOC 10 & Day Tank Field, AOC 11a, AOC 12, AOC 19, AOC 103) are not the only priorities based on identification of free/residual LNAPL, high TW and/or soil VOC/SVOC concentrations, proximity to site perimeter and/or receptors (surface water and/or ecological receptor, vapor intrusion receptor). Please see BGWPA September 2016 SIR comments (“Areas of High/Immediate Concern”). All priority AOCs should be listed.
- 2<sup>nd</sup> Quarter Progress Report: AOC 10 and Day Tank Field- Include the AOC identifier for Day Tank Field: AOC 57.
- 3<sup>rd</sup> Quarter Progress Report: AOC 57 Day Tank Field is no longer referenced as under investigation with AOC 10. Confirm AOC 10 and AOC 57 areas together constitute an RMU and list the AOCs and historic spills in the RMU that will be included in the investigation.
- 2<sup>nd</sup> and 3<sup>rd</sup> Quarter Progress Report: AOC 11a investigation was initiated and is ongoing. AOC 11a includes the AOC 77 AST area and surrounding AOCs. Please see BGWPA September 2016 SIR comment memo and specific comments attachment concerning AOC 11a and proximal AOCs. Identify what parts of the ground water RIW have been done and when, what parts remain pending and provide schedule for implementation.

**Earth Systems/Hess Response 4:**

- The list of priority AOCs will be updated as per this comment, starting with the

next quarterly report, which is the 2021 Second Quarter Progress Report (2021). As per the comments, the following AOCs will be listed as high priority AOCs:

- AOC 1 – North Landfarm
  - AOC 2 – South Landfarm
  - AOC 3 – No. 1 Landfarm
  - AOC 10 – Truck Loading Rack
    - AOC 8 – Waste Drum Storage Area
    - AOC 29 – Mixing Basin
    - AOC 43 – Truck Unloading Area
    - AOC 57 – Day Tankfield
      - AOC 110 – 110 Oil/Water Separator
      - AOC 111 – Chemical Storage Area
    - AOC 82 – Former Incinerator Building
    - AOC 86 – Truck Rack Vapor Recovery Unit
    - AOC 109 – Truck Rack Sump
  - AOC 11a – Administration Building
    - AOC 78 - Administration Building Drainage Channel
  - AOC 12 – Smith Creek and Detention Basin
  - AOC 14a – TM Monitoring Wells
  - AOC 16b – Marine Terminal Loading Area
    - AOC 85 – Marine VRU/TK-4701 and TK4801
  - Tankfields
    - AOC 46 – Slop Gasoline Unloading Area
    - AOC 53 – Second Tankfield
    - AOC 54 – Third Tankfields
      - AOC 6 – HSWA UST
    - AOC 56 – Second Reserve Tankfield
  - AOC 103 – Fire Pits/Fire Training Area
- The identifier for the “Day Tankfield” will be included in this section (AOC 57).
  - AOC 10 and AOC 57 will both be addressed in the Truck Loading Rack Remedial Investigation Workplan (RIW) targeted for submittal in the first half of 2021. This RIW will also include historic spills within the area as well.
  - A detailed update of the status of the Remedial Investigation (RI) of AOC 11a will be included in future quarterly reports, starting with the Second Quarter Progress Report (2021). We are currently in the process of coordinating additional vapor intrusion sampling during the heating season and provided a Scope of Work to the NJDEP and EPA for review on March 5, 2021.

#### NJDEP Comment 5: RIWs under Revision

- AOC 46 Slop Gasoline Unloading Area (near North Landfarm) (2015 SIR: TW-1 sheen and VOC results) is not listed in any of the tank areas. AOC 46 should be listed.
- Historic spills within the RIW areas should also be listed.

- Include prior SIR review comments in development of future RIWs.
- Include Truck Loading/Day Tank Field RMU area and list AOCs and historic spills within this area.

#### **Earth Systems/Hess Response 5:**

- AOC 46 is included in the Tankfields RIW, targeted for submittal in the first half of 2021.
- Historic spills will continue to be addressed in the forthcoming RIW submittals.
- The SIR comments have been addressed and/or utilized in the preparation of all RIW submittals.
- The Truck Loading Rack RIW includes all AOCs and historic spills in the area.

#### **NJDEP Comment 6: Section 2.1 Ground Water Gauging**

- Elevation information for the three new gauging locations were included in Table 1a (34d Quarter PR). Supporting survey sheets will need to be part of the 4<sup>th</sup> Quarter Progress Report with site wide gauging and sampling data.
- The North Ditch and Detention Pond staff gauges may warrant resurvey due to ice damage.
- New surface water gauging locations should be depicted on figures.
- The May monthly gauging event is identified as coincidental with the “annual site-wide gauging event”. Clarify if the May gauging event was in addition to the November gauging and sampling event that includes site-wide sampling.
- A product –like substance was identified at FA-5: Was the product sampled for LNAPL fingerprinting and/ or PFAS-parameters?

#### **Earth Systems/Hess Response 6:**

- As our conference call to discuss these comments occurred during the completion of 4<sup>th</sup> Quarter Progress Report, it was agreed upon by the agencies to include this data with the subsequent reports. Select monitoring wells are gauged on a monthly basis and all Site monitoring wells are gauged during the second and fourth quarters. All survey documentation for surface water gauges will be included in the Second Quarter Progress Report (2021). Surface water gauges are inspected continually and will be resurveyed, if necessary, due to damage from weather.
- Surface water gauges are included on all contour figures included with the quarterly progress reports.
- All Site monitoring wells were gauged in both May 2020 and in November 2020.
- A sufficient amount of the product-like substance from well FA-5 has not been available to collect for fingerprint sampling. As per the laboratory, a liter of material is required to conduct the fingerprint analysis. However, only globules have been present in the monitoring well. The well will continue to be monitored and a sample collected, if possible.

## NJDEP Comment 7: Section 2.2 LNAPL IRM

- Limited wells (PL-5) and the interceptor trench were vacuum extracted once during the 2<sup>nd</sup> Quarter based on the text, and twice in the 3<sup>rd</sup> Quarter. Socks were replaced at multiple wells at each monthly gauging event and were described as “saturated”. Saturation at each monthly inspection indicates that sock inspection and replacement should be more frequent. Increase the frequency to a minimum of twice a month where socks have been identified as “saturated” at monthly inspections. Increase the frequency as needed so that the sock is not fully “saturated” upon replacement.
- LNAPL at PL-5R is an ongoing concern in proximity to underground pipelines and increasing LNAPL thickness. Reevaluate PL-5R LNAPL IRMs (methods, frequency, etc.) and update the Department on the IRMs.
- Include extraction events in Table 1a Notes and Historic LNAPL table.

### Earth Systems/Hess Response 7:

- Gauging events are now being conducted on a biweekly basis for select wells. “Saturation” may have been defined in the field as loaded with silt, debris, etc. and may not have been indicative of saturated with contaminant constituents. More details regarding gauging observations will be included in future quarterly reports, including a more robust definition of “saturation”.
- Current Interim Remedial Measures (IRM) for well PL-5R continue to be addressed, evaluated, and documented in future quarterly reports. If necessary, new IRM protocols will be proposed.
- In addition to summarizing vacuum extraction events in the text of the Quarterly Report, the Historic LNAPL and Monthly Gauging tables have been updated to include the dates of all vacuum extraction events as well.

## NJDEP Comment 8: Section 3.1 Low-Flow Sampling Methodology and Section 3.2 Ground Water Sample Collection:

- The Department requests notification of a sampling event to observe field set up and implementation to provide any additional suggestions.

**Earth Systems/Hess Response 8:** Earth Systems will continue to notify the NJDEP and EPA at least two weeks prior to all sampling events. Pursuant to the NJDEPs comments in the January 12, 2021 meeting, the NJDEP will not be conducting any fieldwork until the end of the pandemic.

## NJDEP Comment 9: Areas of Concern and SWMUs (Earth Systems/Hess Response directly follows each comment)

- Identify the timeline to complete North Landfarm tank basin lining. Delay of final closure should lead to implementation of a temporary capping alternative. Provide other tank basin lining plans (and progress). Understanding where this is implemented and when may affect ground water flow interpretations. Also, confirm that tank basin lining will not limit remedial investigation/actions.

- Tankfield lining is currently being addressed as a separate topic. A response to the NJDEP/EPA questions regarding lining of the tankfields was uploaded on February 8, 2021 and a meeting held on February 5, 2021.
- Provide updated ground water sampling plan for the North Landfarm. Comments regarding updating ground water sampling plans for post closure care periods were previously provided with the closure plan reviews. No plans have been submitted to date.
  - As discussed during the January 2021 meeting, revised pre/post closure groundwater sampling plans are being prepared for all landfarms and are targeted for submittal in the first half of 2021.
- Identify the timeline to respond to March 2019 comments on South Landfarm closure plan. Delay of final closure should lead to implementation of a temporary capping alternative.
  - The March 2019 comments pertaining to the South Landfarm will be addressed in the Third Quarter of 2021.
- Provide updated ground water sampling plans for the South Landfarm. Comments regarding updating ground water sampling plans for post closure care periods were previously provided with the closure plan reviews. No plans have been submitted to date.
  - As discussed during the January 2021 meeting, revised pre/post closure groundwater sampling plans are being prepared for all landfarms and are targeted for submittal in the first half of 2021.
- Provide updated ground water sampling plans for the No. 1 Landfarm, and No. 1 Landfarm leachate sampling plan. Comments regarding updating ground water sampling plans for post closure care periods were previously provided with the closure plan reviews. No plans have been submitted to date.
  - As discussed during the January 2021 meeting, revised pre/post closure groundwater sampling plans are being prepared for all landfarms and are targeted for submittal in the first half of 2021.

**NJDEP Comment 10: Figures and Tables (Earth Systems/Hess Response directly follows each comment)**

- Identify locations of any omitted AOCs based on PAR and/or SIR.
  - No AOCs have been omitted from the AOC figures.
- AOC 13 includes the oily water lagoon, the mini-lagoon, and the backwash lagoon. Figures and labels do not accurately reflect the oily water and mini-lagoon limits, and do not include backwash lagoon boundary. Information from a schematic drawing is still shown for oily water lagoon, API Separator piping to former treatment plant and former treatment plant.
  - The boundaries of AOC 13 have been reviewed in conjunction with available schematics and aerial photographs and the depiction of AOC 13 features has been revised.

- The AOC 78 location is not consistent with aerial photos as previously commented on.
  - Historic information regarding the location of AOC 78 will be reviewed in conjunction with aerial photographs and the AOC figure revised if appropriate.
- Historic spill locations should be included on the AOC/RMU figures and incorporated into future RIWs.
  - Historic spills will be included on the AOC map included with all future quarterly reports. Historic spills will continue to be addressed in the appropriate RIWs that are targeted for submittal in the first half of 2021.
- Figures do not include underground petroleum pipelines, the urban sewer, stormwater collection system, or the discharge lines from original oil water lagoon and former AWWTP. Figures should include all piping at the site as they can be preferential pathways.
  - Quarterly report figures have been updated to include the piping specified above.
- The detention basin was not gauged during each monthly gauging event or during the May annual gauging event. When gauged, the surface water elevation data is not applied to the entire limits of the surface water body to evaluate GW-SW interaction with surrounding ground water elevation data. It appears to continue to be used as a ground water elevation.
  - The detention basin is gauged on a monthly basis. The Second Quarter Progress Report (2021), as well as the upcoming Conceptual Site Model (CSM) Report, will explain how the elevation of the detention basin is used to evaluate surface to groundwater interaction.
- Detention basin surface water limits need to be represented on the ground water contour figures.
  - Detention basin surface water limits have historically been represented, and will continue to be represented, on the groundwater contour figures.
- Clarify if column “DTB from TOC” is based on well construction record or field gauging. Both columns were requested in comments on the WCST (one reflecting well construction record TD from TOC, one reflecting field gauging TD from TOC). The Department acknowledges the receipt of the WCST comments after submission of the 2<sup>nd</sup> and 3<sup>rd</sup> quarterly reports.
- TR-4R and TR-4D labeling: TR-4R is the shallow well, TR-4D is the deeper well. Labeling is reversed.
- TOC elevations for SC-wells are incorrect on this table. See WCST for correct TOCs.
  - The following response is for the above three (3) comments. A revised Well Manual and a Response to Comment (RTC) regarding comments for the initial well manual were uploaded to the portal on January 7, 2021. All Site monitoring well information/comments were addressed in the RTC and revised Well Manual.

- Surface water gauging was not included in each gauging event 2<sup>nd</sup> Quarter, all events 3<sup>rd</sup> Quarter; 3<sup>rd</sup> Quarter included gauging at new Smith Creek staff gauges. Smith Creek staff gauge locations should be depicted on a figure.
  - Surface water levels for the detention basin are always recorded during gauging events and included on Site contour maps. Surface water levels for Smith Creek will also be recorded on a monthly basis and included on Site contour maps.
- Check PL-7 based on “dry” description and DTB from TOC 5.01’ TOC. Well should be screened 5-20’ TOC.
  - A revised Well Manual and a Response to Comment (RTC) regarding comments for the initial well manual were uploaded to the portal on January 7, 2021. All Site monitoring well information/comments were addressed in the RTC and revised Well Manual.
- Include BGS or TOC reference point for column labeled “DTB original” and confirm based on well construction record.
  - A revised Well Manual and a Response to Comment (RTC) regarding comments for the initial well manual were uploaded to the portal on January 7, 2021. All Site monitoring well information/comments were addressed in the RTC and revised Well Manual.
- Clarify if column “DTB from TOC” is based on well construction record or field gauging. Both columns were requested in comments on the WCST (one reflecting well construction record TD from TOC, one reflecting field gauging TD from TOC).
  - A revised Well Manual and a Response to Comment (RTC) regarding comments for the initial well manual were uploaded to the portal on January 7, 2021. All Site monitoring well information/comments were addressed in the RTC and revised Well Manual.
- AD-9DD depth TOC indicates loss of screen interval.
  - A revised Well Manual and a Response to Comment (RTC) regarding comments for the initial well manual were uploaded to the portal on January 7, 2021. All Site monitoring well information/comments were addressed in the RTC and revised Well Manual.
- Check PL-7 based on “dry” description and DTB from TOC 5.01’ TOC. Well should be screened 5-20’ TOC
  - A revised Well Manual and a Response to Comment (RTC) regarding comments for the initial well manual were uploaded to the portal on January 7, 2021. All Site monitoring well information/comments were addressed in the RTC and revised Well Manual.
- Any well in this table is assumed to have a sock deployed or is vacuum extracted. Please clarify this information.

- Earth Systems assumes that the “table” referenced in the above comment is the Monthly Gauging Table. The IRMs utilized for each well will be clarified in the Monthly Gauging Table in all future quarterly reports.
- Add FA-5 and interceptor trench/sumps to the table.
  - Monitoring well FA-5 and the interceptor trench/sumps were included on the monthly gauging table included with the 2020 Second and Third Quarterly Reports and will continue to be included in the gauging table of future quarterly reports.
- Include “globules” as a description along with “sheen” or measured LNAPL thickness.
  - The term “globules” will also be used, if appropriate, in the Monthly Gauging Table.
- Include IRM action in table, e.g., saturated sock/replaced, vacuum extracted.
  - A column for IRM actions has been added to the Monthly Gauging Table.

Should you have any questions or require additional clarification or information, please contact me at 732-739-6444 or via e-mail at [ablake@earthsys.net](mailto:ablake@earthsys.net). If you have any questions relating to the project and schedule moving forward, you can also contact Mr. John Schenkewitz of Hess Corporation at 609-406-3969.

Sincerely,



Amy Blake  
Sr. Project Manager

- c. Ms. Julia Galayda, NJDEP Case Manager (via email/Sharefile)  
 Mr. John Schenkewitz – Hess Corporation (via e-mail)  
 Mr. Rick Ofsanko – Earth Systems (via e-mail)  
 Mr. John Virgie – Earth Systems (via e-mail)